UNITED STATES DISTRICT COURT DISTRICT OF NEW HAMPSHIRE

SECURITIES AND I	EXCHANGE)	
COMMISSION,	Plaintiff,)	
v.	,))	Civil Action No. 21-cv-00260
LBRY, INC.,	Defendant.)	

PLAINTIFF'S MEMORANDUM OF LAW
IN SUPPORT OF ITS *DAUBERT* MOTION
TO EXCLUDE THE OPINIONS AND TESTIMONY OF BORIS RICHARD

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Plaintiff Securities and Exchange Commission moves to exclude the opinions and expert testimony of Boris Richard. Richard fails to employ reliable methods accepted in the field. For several of his opinions, he uses no methods or data at all. When he does, his methods and analysis are both error prone and infected by fundamental errors. And Richard fails to establish "fit" between his analysis and his opinions and between his opinions and the factual questions at issue. Thus, Richard's opinions are not reliable and not relevant, do not comply with the standards in *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579 (1993), and will confuse rather than assist the finder of fact. Accordingly, the Commission moves for an Order precluding LBRY from offering evidence or argument from Richard's testimony and reports at trial or in support or opposition to the pending summary judgment motions.

I. Background

LBRY has submitted two expert reports. On February 4, 2022, LBRY submitted its first report from Richard ("Original Report" or "O.R."; Ex. A). After his deposition revealed substantial flaws in that report, LBRY submitted (on April 29, 2022) an Amended Report ("A.R."; Ex. B). The Amended Report failed to correct Richard's fundamental errors. The Commission has moved to strike the Amended Report as untimely and not consistent with Fed. R. Civ. P. 26 (ECF No. 71).

Richard's Original Report gives, essentially, three opinions. One, Richard opines that "on-chain network activity, excluding transactions related to LBRY addresses, exceeded the LBC coin trading volume on secondary market trading platforms" therefore "LBC token holders used this token primarily as the LBRY platform native currency to publish, consume, and share digital content, and not as an investment asset held and sold for speculative gains." O.R. ¶14. Richard theorizes that if the amount of LBC transacted on-chain exceeded the amount of LBC transacted on crypto exchanges, then purchasers were primarily buying LBC to use it

consumptively on the LBRY Network, rather than for profit. *Id.* ¶¶14, 86-89.

Two, Richard presents an event study and performs a regression analysis to conclude that "there is no empirical evidence to suggest that the LBC token price was controlled or influenced by LBRY or LBRY team public announcements." O.R. ¶¶16, 103-105. Instead, Richard claims that the use and value of LBC increased in response to improved content and utility enhancements to the platform. O.R. ¶¶12, 16, 110-112.

And three, Richard opines on LBRY's goals and its efforts. O.R. ¶11, 15. This section of the O.R. consists of a recitation of LBRY's description of itself and LBRY's development efforts for the LBRY Network. O.R. ¶¶ 13, 17-62, 90-101, 106-109.

Richard's Amended Report reiterates the first and second opinions and analysis from Richard's Original Report (i.e., the transaction-volume analysis and the regression analysis). The Amended Report, though, scrambles his methodology and analysis in an unsuccessful attempt to address the errors laid bare at Richard's deposition. But Richard's methodology and analysis are flawed at the core and his conclusions from that failed methodology are not reliable or relevant.

II. Legal Standard

Federal Rule of Evidence 702 governs when an expert may testify "in the form of an opinion or otherwise." The Rule "necessitates an inquiry into the methodology and the basis for an expert's opinion." *Samaan v. St. Joseph Hosp.*, 670 F.3d 21, 31 (1st Cir. 2012). That opinion must be "the product of reliable principals and methods." *Jenks v. New Hampshire Motor Speedway*, 90-cv-205-JD, 2012 WL 405479, at *2 (D.N.H. Feb. 8, 2012). "The purpose of the inquiry is to ensure that expert testimony is based on scientific knowledge rather than guesswork." *Id.* (internal quotation omitted). LBRY bears the burden of showing admissibility by a preponderance of proof. *Milward v. Rust-Oleum Corp.*, 820 F.3d 469, 473 (1st Cir. 2016);

Daubert, 509 U.S. at 592 & n.10.

Under Rule 702 and *Daubert*, the Court must evaluate the expert's proposed testimony for both reliability and relevance. *Daubert*, 509 U.S. at 590-91. This gate-keeping function applies to technical and other specialized knowledge. *Seahorse Marine Supplies, Inc. v. Puerto Rico Sun Oil Co.*, 295 F.3d 68, 81 (1st Cir. 2002)(citing *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 141 (1999)). The expert's opinions must have "been arrived at in a scientifically sound and methodologically reliable fashion." *Bricklayers & Trowel Trades Int'l Pension Fund v. Credit Suisse Sec. (USA) LLC*, 752 F.3d 81, 91 (1st Cir. 2014)(affirming rejection of expert testimony in securities case where expert had cherry-picked data). The court should consider "the verifiability of the expert's theory or technique, the error rate inherent therein, whether the theory or technique has been published and/or subjected to peer review, and its level of acceptance within the scientific community." *Seahorse Marine Supplies*, 536 U.S. at 81. Though these factors are not a "definitive checklist or test," they form the basis for a flexible inquiry.

III. Opinions on Use of LBC Based on Transaction Volumes Are Inadmissible

Richard tries to establish that purchasers bought LBC to use on the LBRY Network, to consume digital services, and not for investment. His premise is that he can establish the LBC buyers' motivations by looking at where the LBC transactions are conducted, and thus he equates on-chain transactions with consumptive use on the LBRY Network and off-chain transactions on crypto exchanges with trading for investment purposes. O.R. ¶14, 86-89. Richard then compares "on-chain network activity, excluding transactions related to LBRY addresses" to "LBC coin trading volume on secondary market trading platforms," and concludes that the majority of LBC token holders used the token primarily as native currency. O.R. ¶14. Richard's underlying premise that "on-chain transaction volume" (as he measures it) is a reliable proxy for the use of a crypto asset for consumptive purposes has no underlying acceptance in the

community or support in any academic or trade literature. Richard has invented both the hypothesis and the method of analysis. When his deposition revealed the flaws in his methodology, he unsuccessfully tried to salvage his theory and conclusion with unexplained methodology changes in his Amended Report.

A. The Opinion Is Not the Product of Reliable Principals and Methods

LBRY cannot meet its burden of establishing the reliability and relevance of its expert's evidence. *Milward v. Rust-Oleum Corp.*, 820 F.3d 469, 473 (1st Cir. 2016).

1. Richard's Method Is Neither Peer-Reviewed or Otherwise Generally Accepted

LBRY cannot show that Richard's theory or technique has been published or subjected to peer review or that it has achieved a level of acceptance within the scientific community. Richard assumes that "on-chain transaction volume" is a reliable proxy for the use of LBC to publish and pay for content on the LBRY network. This assumption, and Richard's use of on-chain transaction volume, finds no support in either the academic or industry communities, and appears unsupported by anything besides Richard's say-so. Neither of Richard's reports cite any support for his use of on-chain transactions in this way. See O.R. ¶68, 86-89 (citing no sources); A.R. ¶16-29 (same); O.R. App. B (not listing any sources relating to on-chain transaction volumes); see generally A.R. (failing to provide list of documents relied on).

Nor does a literature search yield sources supporting Richard's method. Two financial economists in the Commission's Division of Economic and Risk Analysis each searched for literature about analyzing blockchain transactions data to determine the purpose of the cryptocurrencies' use. Neither could find any support for the premise on which Richard bases his opinion. Ex. C; Ex. D.

In fact, industry literature undermines Richard's use of the on-chain transaction volume

to measure "native use" of LBC. An article from Chainalysis observes that many on-chain transactions involve transactions to and from crypto exchanges, and that crypto exchanges themselves also perform transactions on-chain. It estimates that 86% of economically relevant addresses on the Bitcoin blockchain belong to named services, such as crypto exchanges. *See* Ex. E. An article from the Blockchain Council states that long-term crypto holdings are typically considered to be better kept on the blockchain (due to higher security of blockchain transactions that are verified by miners). *See* Ex. F ("Crypto Off-Chain vs. On-Chain Transactions: How Do They Differ"). These sources undermine Richard's assumption that on-chain transaction volume is an accurate way to measure use of LBC to publish, consume, and share digital content on the LBRY Network.

There is "no indication ... that other experts in the industry use" Richard's methods to determine "native use" of a crypto token. *Kumho Tire*, 526 U.S. at 157. Richard appears to have created this analysis for this litigation, without any industry or academic source supporting his methodology, and it should be excluded. *Earley Info. Sci., Inc. v. Omega Eng'g, Inc.*, No. CV 19-10364-FDS, 2021 WL 5868249, at *4 (D. Mass. Dec. 10, 2021) (excluding expert opinion because, in part, expert's "approach appears to have been created solely for the purpose of this litigation"). An expert may not opine based solely on a generic appeal to his own expertise. *Kumho Tire*, 526 U.S. at 157 ("nothing in either *Daubert* or the Federal Rules of Evidence requires a district court to admit opinion evidence that is connected to existing data only by the *ipse dixit* of the expert."); *Earley Info.*, 2021 WL 5868249, at *5 ("Generic appeals to an expert's experience are no substitute for reliable principles and methods").

2. Richard's Method Appears to Have a High Error Rate

Richard's method of using on-chain transaction volume to measure use of LBC for digital content consumption is not only based on an unsupported hypothesis, but it was also not reliably

applied. Rule 702 requires that the "the expert has reliably applied the principles and methods to the facts of the case." And the *Daubert* reliability inquiry includes a consideration of the error rate in the methods the expert employs. 509 U.S. at 594. Richard's on-chain transaction volume method has a high error rate, which suggests it is unreliable and justifies exclusion.

First, Richard admits that his Original Report did not properly deduct LBRY's activity from the on-chain transaction volume, which Richard says is necessary for accurate analysis. Richard's original report deducted the activity from 18 wallet addresses controlled by LBRY, "[i]n order to capture the true economic activity of LBRY users." A.R. ¶16. But Richard was unaware when he performed his analysis that, in fact, LBRY used "thousands" of wallet addresses for its own LBC activity. *See* Ex. G (Richard Tr.) at 254:15-255:5. His Amended Report purported to correct this error by removing activity from an additional 2,508 wallet addresses affiliated with LBRY. But he does so without full details of what wallet addresses he is deducting or how he deducted them². By submitting the Amended Report, Richard is effectively conceding that there was a significant error in the previous analysis based on inaccurate data.

Second, both the Original and Amended Reports have a high error rate because of the way that on-chain transaction volume is counted. When Richard measured on-chain transaction volume, he included the total amount of the digital wallet address in a transaction, instead of the amount of the transaction itself (an issue called the "change problem"). In traditional terms, if someone had \$100 in their wallet and bought a \$5 ice cream cone, Richard counted that

¹ The number of addresses LBRY provided to Richard *still* differs from the number in LBRY's amended interrogatory answers. LBRY waited to provide additional report data until one business day before this motion was due and months after Richard's report was submitted.

² Further argument on this point is in the Commission's Motion to Strike the Amended Report (ECF No. 71).

transaction as \$100, not \$5. Richard admitted that his intent was to record the amount of the transaction (the \$5), not the total amount of the wallet (the \$100). Ex. G at 244:16-246:25. And he admitted this methodology flaw. A.R. ¶ 20 ("Although the net amount of this transaction is 20 LBC . . . the amount of the transaction would be recorded on the blockchain as 100 LBC."). Thus, the on-chain transaction volume is not a reliable measure of the use of LBC by users consuming digital content because it suffers from what Richard dubs "inflation bias." A.R. ¶22.

This issue is a problem known to the crypto industry: a Chainalysis article details how only a fraction of the transaction volume represent transactions where tokens are being spent or transferred to someone else because of the way on-chain transactions are structured (to sell 1 out of 100 tokens, data would record a sell of 100 tokens and a return of 99 tokens). *See* Ex. E. The article estimated that, when looking at the Bitcoin blockchain, actual spending/transferring transactions represent only 20% of observable on-chain transactions. The remaining transactions are artificially structured transactions representing returns of the unsold portion of tokens.

Richard's Amended Report does not fix the change problem. Instead, Richard claims the error is "mitigated" (though the extent of the mitigation is unclear) through unreliable new methods he made up for his report. A.R. ¶22-27. First, he argues that there are "optimization algorithms" that "mitigate" the "potential inflation bias." A.R. ¶19, 22. Richard does not adequately describe what this algorithm is or does, and does not analyze how much it mitigates the change problem.

Second, Richard tries deducting transactions from wallets that are "known wallets for entities that received LBC tokens from LBRY-affiliated addresses related to its Operational and

³ "Q: ... you need your on-chain transaction volume to record the amount of transaction not the total amount of the wallet, correct? ... A: I definitely — not the amount — not — not the balance of the wallet."

Institutional funds and which were LBRY's partners for purposes of trading and liquidity provision . . . or community and strategic development, such as the LBRY Foundation and Anti-Media." Richard offers no analysis of how deducting these transactions actually mitigated the change problem or impacted the accuracy of his analysis, simply noting that the removal "likely reduced further" the impact of the problem. A.R. ¶24. Nor does Richard provide sources for the data used in this new analysis, leaving his data and results unverifiable.⁴

Richard's Amended Report then chooses certain dates on which he simply removes some of the large transactions from his analysis. A.R. ¶26. Once again, this method is advanced with no support or explanation. Richard defines particular "spike dates" as days when "the average on-chain transaction size was more than three times larger than the long-term average transaction size between 2016 and 2021." A.R. ¶26. The choice of "three times larger" seems to be arbitrary. Again, Richard gives no explanation of how these deductions would reduce the errors in his on-chain transaction volume measurements (particularly errors relating to the change problem), though Richard claims "this approach is conservative." *Id*.⁵

Richard's analysis also fails the common sense test because it shows the average onchain transaction—which he interprets as a transaction related to video content—in the tens to thousands of dollars *for each transaction*. Applying Richard's theory, that would mean each time a user spent LBC on video content, the average user was spending the equivalent of from tens to thousands of dollars. Richard's data show the U.S. dollar value of an average transaction

⁴ Richard's footnote suggests that he deducted transactions from seven addresses. A.R. n.8. But it strains credulity to think deducting seven addresses fixes an analysis flawed by the fact that, for each transaction he is measuring, the entire wallet address amount is recorded as "on-chain transaction volume," when the transaction may only be a small fraction of that amount. The "cure" does not relate to the sickness.

⁵ Even if Richard's new method mitigated the problems with his original analysis, this "spike dates" approach altered the analysis of only 60 out of 2018 total days, according to the new spreadsheet of this analysis provided by LBRY counsel. The "potential inflation bias," as Richard calls it, would remain for the other 1,957 days. Jones Decl., ¶3b; Ex. I.

fluctuating wildly day-to-day and far-above what the value might be expected if those transactions were actually measuring LBC spent for digital content uses.

For instance, on July 7, 2016 (a few weeks after the LBRY blockchain went live) Richard's data shows that the average amount per transaction was \$12.20. Five days later, the average was \$2,942.15 for each transaction. Then the next day (7/13), the average transaction cost \$76.52; then \$2,122.67 on 7/14, and \$49.65 on 7/15. Jones Decl. ¶¶2-3; Ex. I; see also Ex. H (graph of values). As another example, Richard's data shows the average transaction over the course of 2017 was \$204.82. In other words, if on-chain transaction volume was an accurate measure of the use of LBC for video sharing purposes, then the average user on a day in 2017 spent about \$205 per transaction (i.e., according to Richard's assumption, per video published or watched, or content creator tipped). These anomalous average transaction values persist throughout Richard's data. Ex. I; see also Ex. H (graph of values). And the anomaly is particularly apparent considering LBRY's testimony that most of the LBRY Network content is free to watch (PX147 at 225:20-24), that the average cost to publish content to the LBRY network was stable at around 1/100 of an LBC (or fractions of a U.S. penny) at least through 2019 (PX153 at 107:9-109:3), and that through the date the Complaint was filed, users purchased content fewer than 5,350 times, or fewer than four transactions per day on average. PX148 at 218:8-220:3, PX154. If Richard's assumptions and analysis were correct, the average cost to publish or watch a video yo-yoed thousands of dollars every day. This defies common sense and goes against the historical record.

Richard's method also introduces error when he calculates the ratios of on-chain and offchain transaction volumes. This is the chart from Richard's Amended Report:

Exhibit #8B – LBRY On-Chain Transaction Volume, Excluding Transactions of LBRY-Affiliated Addresses, Strategic Partner Addresses, as well as Transactions Exceeding Average Transaction Size by More Than Three Times, Significantly Exceeded LBC Secondary Market Trading Volumes in 2016-2021 (by LBC Count)

Year	On Chain Transaction Volume (a)	Secondary Market Trading Volume (b)	Difference (a-b)	On Chain/Trading Volume (a/b)
2016	341,469,678	129,992,778	211,476,900	2.63
2017	934,178,925	1,906,136,580	(971,957,655)	0.49
2018	416,641,736	1,486,012,563	(1,069,370,827)	0.28
2019	1,167,975,254	1,408,055,812	(240,080,557)	0.83
2020	26,008,436,797	7,833,785,244	18,174,651,553	3.32
2021	10,919,325,326	16,026,785,553	(5,107,460,227)	0.68
Total	39,788,027,716	28,790,768,529	10,997,259,187	1.38

From this data, Richard concludes that "the on-chain activity in LBC substantially exceeded the secondary market trading activity . . . during the 2016-2021 period. In other words . . . that the LBC token was used by its holders primarily as a native currency on the LBRY platform to consume digital services, and not for trading and speculative investment gains." A.R. ¶29; see also O.R. ¶87 & Report Ex. 8 (drawing similar conclusion).

There are multiple potential errors in Richard's approach. First, Richard employs no known standard for his opinion. He finds that the 1.38 ratio of on-chain to off-chain means that LBC purchases were "primarily" for the consumption of video. As long as this ratio is above 1, he claims, he can opine that video use was the primary purpose for LBC purchases. Second, for four of the six years Richard analyzed the ratio is far below 1. Yet Richard concludes that—across the entire period—video-related purchase of LBC was primary. He gives no explanation why aggregating the data in this way is methodologically sound, or why 2021 volumes say anything about purchases in 2017. He does not explain how he can logically draw conclusions about what intent is "primary" from a particular ratio, or how mixed-motive transactions could—or should—impact his analysis. Third, Richard's method is highly dependent on which years he includes in the analysis. If one were to look across just 2016 through 2019, the ratio would be 0.53, meaning that off-chain transactions exceeded on-chain by almost 2 to 1. Using his ratio method, he seems to say that from 2017 through 2019 users bought LBC investments, switched

for one year in 2020, then switched back in 2021. Richard does not explain why in his reports or in his deposition. Ex. G at 186:15-192:7. Finally, Richard's ratio is highly dependent on his assumption that on-chain transaction volume translates exclusively to LBC bought for use within LBRY applications. But because on-chain volume actually includes not only LBC used for video, but also LBC bought for investment purposes, the calculations are inaccurate and the analysis is flawed.

Richard presents no study, observation, or analysis of the blockchain data to test or show on-chain transactions are an adequate proxy for measuring consumptive use of LBC, and his methodology suffers from significant errors and is not supported by data.

3. Richard's Method Is Not Verifiable or Reproducible

Richard's report also fails the "verifiability of the expert's theory or technique" factor of the *Daubert* inquiry. *Ruiz-Troche v. Pepsi Cola of Puerto Rico Bottling Co.*, 161 F.3d 77, 80-81 (1st Cir. 1998). Richard's on-chain transaction volume method and its relationship to actual use of LBC for digital content sharing on the LBRY network cannot be verified. First, Richard has not adequately described his methods and data sources to check his work. Richard admitted this in his testimony about the original report. Ex. G at 153:23-157:9 ("Q: So without the list of wallet addresses that you deducted, I cannot reproduce your results, correct? A: You can reproduce a large portion of it.").⁶

Nor does Richard do anything to verify his data, or test the robustness of his LBC-uses assumption. LBRY purports to have records of LBC spending, but instead relies on Richard's unreliable proxy. [ECF No. 62-6 (PX6) at 220:24-224:5, ECF No. 62-20 (PX20) at 147:25-

⁶ Richard also admitted that his report did not accurately reflect his methodology: "Q: So, Dr. Richard, am I understanding you right that you removed more than you said you removed in paragraph 68? ... A: Yes. We removed a large amount of activity. That's correct." If Richard did not accurately describe his methodology in his report, it would be impossible to verify his results.

148:3, ECF No. 70-23 (PX148) at 220:24-222:5.] Kauffman, in his summary judgment declaration, testifies to April 2022 data about, for instance, the number of on-network transactions using LBC and the number of content purchases. ECF No. 61-3, ¶¶ 55, 57. If LBRY has data concerning the actual use of LBC for digital content sharing, it should not be permitted use an expert to introduce this error-ridden proxy instead.

B. The Volumes Opinion Does Not "Fit" the Facts and Is Not Relevant

Richard has not established that on-chain transactions demonstrate video-related use on the LBRY Network, or that the ratio of use accurately reflects the token users' motivations in buying LBC. Thus, Richard's on-chain transaction volume-based opinion does not meet the "fit" requirement of the *Daubert* standard. "Fit" requires the expert to connect his opinions to the facts of the case. Daubert, 509 U.S. at 591. "[T]he results of a scientifically reliable experiment or study will fail Daubert's fit requirement and be excluded unless the results can be linked through scientifically reliable means to the expert opinion it purports to support." Grimes v. Hoffmann-LaRoche, Inc., 907 F. Supp. 33, 35 (D.N.H. 1995). "For example, if a plaintiff offers scientific testimony that a particular chemical causes cancer in rats in order to prove that the chemical also causes cancer in humans, the testimony will not fit the facts of the case and must be excluded unless the plaintiff also establishes that the expert can reliably extrapolate from rats to humans." Id. (citing In re Paoli R.R. Yard PCB Litig., 35 F.3d 717, 743 (3d Cir. 1994). The court should "examine [the expert's] conclusions to determine whether they flow rationally from the methodology employed." Samaan v. St. Joseph's Hosp., 670 F.3d 21, 32 (1st Cir. 2012). Because there is "too great an analytical gap between the data and the opinion proffered, [Richard's] testimony should be excluded." *Id*.

There are substantial reasons to doubt the fit of Richard's opinion. Consider that, in 2021, Bitcoin had an estimated \$4.2 trillion on-chain transaction volume. *See* Ex. J. Bitcoin has

no analog to the LBRY Network, a software system delivering a particular product. Bitcoin's high on-chain transaction volume casts doubt on Richard's assumption that on-chain transaction volume equals "native use" of a token on its blockchain. And, as noted above, the on-chain transactions includes both transactions to and from exchanges and transactions of the crypto exchanges themselves. *See* Ex. E (~ 86% of economically relevant addresses on the Bitcoin blockchain belong to named services such as exchanges). During testimony, Richard admitted that there were several reasons other than digital content-related use that would increase on-chain transaction volume:

- LBC holders moving LBC from one wallet to another (for security purposes, for instance). (Ex. G at 193:21-195:16);
- Transfers of LBC to and from crypto exchanges increase the on-chain volume. (Ex. G at 197:16-198:25);
- Purchases of LBC for investment purposes made "on-chain" (where there is a blockchain-enabled record of the possession of those LBC, making the LBC more secure and costing less in transaction fees). (Ex. G at 199:1-202:1);⁷ and,
- The "change problem" discussed above, causing what Richard calls "inflation bias." (A.R. (Ex. B), ¶24).

On-chain transaction volume exceeds LBC use for publishing, watching, and tipping by an unknown but potentially very large amount. LBRY should not be permitted to have its expert testify about the on-chain/secondary market ratio, without establishing the "fit" of on-chain volume to video-related use of LBC.

Moreover, and more fundamentally, Richard fails to establish that either the on-chain transaction activity or the ratio of on-to-off chain activity actually reflects the motivations, intent, and expectations, of the individuals transacting in LBC. For instance, he fails to address or

⁷ Also undermining Richard's unsupported assumption that secondary market transactions represent the entire amount of LBC bought for investment purposes.

analyze LBC transactions where the purchaser has a mixed motivation, such as a purchaser who buys 1000 LBC, uses a few to test the LBRY Network, and holds the rest with the expectation that LBC will increase in value as LBRY continues its development efforts. Richard does nothing to test the robustness of his assumption that all on-chain transactions are for video content use, and all secondary market transactions are for investment.⁸

In sum, Richard's transaction-volume opinions stem from an unproven, unexplained, and flawed methodology relating to on-chain transaction volume, and are not connected enough to the questions here. *Daubert* and the cases that followed demand more from an expert and the party proffering him. Thus, Richard's report, testimony, and opinions on this topic do not fulfill the requirements of *Daubert* and Fed. R. Evid. 702. The Court should not permit LBRY to use them for summary judgment or trial.

IV. Opinions and Analysis about the Relationship between LBC Price and LBRY Public Announcements Are Inadmissible

Richard opines that there "is no empirical evidence to suggest that the LBC token price was controlled or influenced by LBRY or LBRY team public announcements." (O.R. ¶16). The Court should preclude this opinion because (1) the event study Richard uses is not reliable; (2) Richard has cherry-picked data and placed that data into arbitrary categories; (3) Richard has over-reached on the conclusions that can be drawn from an inconclusive event study; and (4) Richard's opinion about price influence is not relevant to any factual or legal questions here.

A. Richard's Event Study Is Not Reliable

1. Errors in the Original Analysis Mean the Analysis Is Not Reliable

There are fundamental errors in the event study in the Original Report. Many of these

⁸ This second part is a substantial concession by LBRY: if secondary market sales are to investors/speculators, then LBRY's sales (which were mainly on the secondary markets) are sales to purchasers who have investment intent and an expectation of profits.

errors are carried through the new analysis in the Amended Report. First, Richard uses a regression analysis to analyze the effect of various kinds of public announcements by LBRY on the price of LBC. O.R. ¶103-05. This regression analysis purports to analyze the price effect of each announcement from the day before the announcement (called "T-1") through the day after the announcement ("T+1"). The price change over that period is then analyzed against the background period of 30 or 90 days, to see if the change in the period of the announcement is statistically different from the background period. To do this analysis properly, the results from the T-1 to T+1 period must be removed from the background period results. In other words, if an announcement happened on January 15, one would remove the price changes on 1/14, 1/15, and 1/16 from the 30- or 90-day period price changes used for comparison. Richard failed to do this.

A.R. ¶7. But he admits he should have. Ex. G at 313:4-13; 315:22-316:11. Thus, the calculations in the Original Report, and the opinions that flow from them, are not reliable.

Second, Richard cherry-picked the announcements he analyzed. Richard analyzed the period from July 6, 2016 through February 24, 2020. During that time there are 236 posts on the LBRY website. But Richard only included about 78 unique posts in his analyses. Jones Dec. ¶4. Ex. L; O.R. Ex. 11, 13. In other words, Richard only looks at 33% of all posts on LBRY website. Richard could not explain why he left out 77% of the announcements, or what method he used to include or exclude an announcement. Ex. G at 263:23-264:12. Compounding this methodological error, Richard categorizes each announcement – but uses no discernable method for placing an announcement into one of the categories he is analyzing. *Id.* at 260:15-268:24. Nor does his method account for when a website post might have more than one piece of news that might put it in more than one category. All of these methodological errors add up to an event study that should not be admitted because it is not reliable.

2. Problems with the Design of the Study Also Show Lack of Reliability

Richard's event study "estimated LBC abnormal returns around the LBRY team announcement dates after adjusting for the Bitcoin price change (used as the proxy for the overall cryptocurrency market), and then established whether such abnormal returns were statistically significant at 5% significance level." O.R. ¶104. At deposition, Richard admitted that at various times analyzed in his event study there was only a very weak connection between the price of LBC and the price of Bitcoin. In fact, at certain times a change in the price of Bitcoin explained only 2-3% of the change in price of LBC. Ex. G at 307-308. Richard admitted that if the Bitcoin price change only explained 2% of the LBC price change, something else would explain the other 98%. *Id.* In addition, Richard's model (which forms the foundation of his event study) sometimes shows a positive correlation between the change in the price of Bitcoin and the change in the price of LBC, and sometimes is shows a negative correlation. In other words, Richard's model sometimes expects LBC to go up when Bitcoin goes up, and sometimes it expects the opposite, for LBC to go up when Bitcoin goes down. This fluctuation in how the model works is unexplained, but suggests that the model does not accurately analyze the LBC price effects of LBRY's announcements.

3. A "Negative" Event Study Does Not Prove Lack of Causation

Finally, Richard uses his event study to opine that LBRY's public announcements do not effect LBC price. O.R. ¶16. Richard concludes this from the lack of a statistically significant LBC price change on the day before a LBRY announcement through the day after the announcement. In making this conclusion, Richard has fallen into a common trap in event studies: assuming that the lack of statistically significant result proves the negative.

In statistics, the lack of statistically significant result does not prove the null hypothesis. Ex. K (*Reference Manual on Scientific Evidence (Third Edition*), ch. 5, p. 45)("When a study

with low power fails to show a significant effect, the results may therefore be more fairly described as inconclusive than negative."). Here, Richard states that the null hypothesis in his event study is "that there's no impact of a particular announcement or the particular type of announcement on the price performance" of LBC. Ex. G at 322:14-16. Richard's findings that there was not a statistically significant *do not* establish that there is no price effect; they only establish that the study he designed could not determine whether there was a price effect. In other words, if Richard were to be asked whether a particular announcement affected the price of LBC, he could only truthfully answer, "I don't know." That opinion would not aid the jury in determining facts, so the testimony should be excluded.

B. Richard's Opinions about Price Influence are Not Relevant

In addition, Richard's conclusions are irrelevant to the questions of law and fact to be decided. Whether LBRY can control the price of LBC does not alter whether LBRY sold LBC as an investment contract. No part of the *Howey* test suggests that the Commission would need to show that price control, or that its lack would be exculpatory. Nothing about *Howey* requires a relationship between LBC price and announcements from LBRY, particularly those that are not about new functionality of the LBRY Network. Thus, the event study and the opinions that flow from it should be excluded as not relevant to the facts needed to be found by the jury.

V. Opinions about LBRY's Efforts and Intent are Not Expert Opinions

Richard employs no discernable method to form his opinions about LBRY's efforts and intent. This part of the report is not expert opinion; it is mere bolstering of LBRY's arguments.

A. Richard's Opinion Is Not Based on Scientific, Technical, or Other Specialized Knowledge

LBRY should not be permitted to introduce Richard's opinions on LBRY's history and intentions to the jury. Richard dedicates a substantial portion of his report to his opinions about

LBRY's "goal," "exclusive focus," what its "two cofounders believed" about blockchains and other topics, its "consistent priority," whether it promoted secondary trading, and similar statements about LBRY's intent. (O.R. ¶11 ("LBRY's goal has been to create ... [t]o fulfill this goal, the LBRY team's efforts since the middle of 2016 have been exclusively focused on building..."), 15, 27-28, 35-36, 49-51). But Rule 702(a) requires that an expert's testimony "help the trier of fact to understand the evidence or to determine a fact in issue." 29 Charles Alan Wright, et al., Federal Practice and Procedure § 6274 (1997). The jury does not need Richard's testimony to determine LBRY's goals, intent, or beliefs, as much as those are even relevant to the jury's inquiry in this strict liability violation. The Court should exclude all of this testimony and opinion because drawing inferences as to motivation or intent are left to the trier of fact. *Schneider v. BMW of North Am., LLC*, No. 18-cv-12239, 2022 WL 1718996, *4 (D. Mass. Feb. 22, 2022) ("Manzari's expertise as an automotive mechanic does not entitle him, however, to offer an opinion concerning BMW's motivation or intent.").

On top of these intentions opinions, Richard opines about the technical development and status of the LBRY Network. *See, e.g.*, O.R. ¶¶ 11, 13, 18-62. For instance, Richard opines that "LBRY user applications were substantially functional before the first sale of LBC token on the centralized trading platforms out of the Operational Fund in the third quarter of 2017." *Id.* ¶13. To arrive at his "opinion" about the applications' functionality, Richard only reviewed and summarized LBRY's statements. Ex. G at 119:10-24. Parroting LBRY's arguments does not equal expert analysis. Rule 702's reliability requirement demands that "the expert's opinion be based on the 'methods and procedures of science' rather than on 'subjective belief or unsupported speculation'; the expert must have 'good grounds' for his or her belief." *Grimes v. Hoffmann-LaRoche, Inc.*, 907 F. Supp. 33, 35 (D.N.H. 1995)(quoting *In re Paoli R.R. Yard PCB*

Litig., 35 F.3d 717, 742 (3d Cir.1994); Daubert, 509 U.S. at 590). Richard does not use any scientific or technical knowledge for his opinions about the functionality of LBRY's applications or LBRY's intentions. In fact, he appears to have performed no work except reading LBRY's public statements. For instance, for his opinion about the functionality of LBRY's applications when it first sold LBC on crypto exchanges, Richard did not use LBRY's applications as they stood in 2017; did not look at the 2017 program code; has never interviewed beta testers or even LBRY employees who used the software then; has never read written statements or reports from beta testers about the applications' functionality; and has never evaluated the failure rate for the applications. Nor is Richard a software or systems engineer. He has no expertise in evaluating the functionality of a computer system and has performed no work to perform such an evaluation. The Court should exclude any opinion Richard offers about the technical aspects and workings of the LBRY Network because he has performed no methods and procedures other than reading LBRY's public posts and because he brings no particular expertise.

B. Richard's Opinion Is Not Based on Sufficient Facts or Data

Without relying on facts or data, Richard heralds the use of LBC to stake, tip, publish, and pay for content and he opines about how users employed these mechanisms. He expresses several opinions about how critical these mechanisms are to a user's success on the LBRY Network. He opines that "publishers who have been active in engaging other users and publishers, and who are more generous with their LBC in terms of supporting and tipping content, are more likely to accrue greater rewards through view-based rewards." O.R. ¶81. But Richard provides *no* supporting data or facts for these opinions. Data about publishers, tipping, supports, payment all reside on the blockchain, but Richard does not cite or use any data for his conjectures. He has apparently not done any review of which publishers received the most view-based rewards and whether they have, in fact, been more "generous" or been active engaging

with other publishers. In fact, Richard has conducted no analysis of the amounts of LBC that have been specifically used for tipping, staking, payments, claims, or supports. All of his opinions about those mechanisms and the LBC used through those mechanisms are untethered and unsupported by any data. *See, e.g., id.* ¶80-84, 93.

An expert's opinion is inadmissible when it is connected to "existing data only by the *ipse dixit* of the expert." *Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 146. Expert testimony may be excluded if there is "too great an analytical gap between the data and the opinion proffered." *Id.* "[T]rial judges may evaluate the data offered to support an expert's bottom-line opinions to determine if that data provides adequate support to mark the expert's testimony as reliable." *Ruiz–Troche*, 161 F.3d at 81. To opine as he has about the specific usage of LBC on the LBRY Network, Richard must rely on data and facts and not simply his knowledge that mechanisms exist to spend LBC. As a result, the Court should exclude those opinions about LBC usage that are not supported by contemporaneous data from the LBRY blockchain on the amounts of LBC used for tipping, payments, claims and so on.

VI. Conclusion

As discussed above, the Richard Original Report, Amended Report, and proposed testimony do not meet the *Daubert* standards for admissibility. The Court should therefore exclude Richard's testimony and opinions from its consideration of the parties' summary judgment motions and, if necessary, at trial.

Dated: July 18, 2022 Respectfully submitted,

SECURITIES AND EXCHANGE COMMISSION

By its Attorneys,

/s/ Marc Jones

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RULE 7.1 CERTFICATION

I certify that I attempted in good faith to obtain concurrence from Defendant on the relief sought here, but was unable to do so.

/s/ Marc Jones
Marc Jones

CERTIFICATE OF SERVICE

I hereby certify that, on July 18, 2022, I caused true and correct copies of the foregoing to be served on counsel of record for all parties that have appeared to date through the Court's CM/ECF system.

/s/ Marc Jones
Marc Jones